

REMARKS

In response to an Office Action dated March 10, 2004, Applicants respectfully traverse and request reconsideration.

Amendment to Specification

The paragraph beginning on Page 9, line 10 has been amended to include further language regarding the specific limitations of the lowest bit occurrence and the highest bit occurrence. As Applicants previously submitted, the lowest bit occurrence is synonymous with the discussed lower limit 401 and the highest bit occurrence is synonymous with the discussed upper limit 402. Applicants submit these amendments do not add any new subject matter as these limitations were contained with the specification as originally filed, included not only recited in the original claims, but also inherently disclosed within the discussed lower limit 401 and upper limit 402 and further discussed regarding FIGS. 7-10. Therefore, entrance of the above amendment is respectfully requested.

Rejection of claims under 35 U.S.C. §112, P2

Claims 1-35 and 43-60 stand rejected under 35 U.S.C. § 112 as allegedly failing to comply with the enablement requirement. More specifically, the Office Action states that the claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In view of the proposed amendments to the specification, Applicants respectfully submit the present rejection is moot.

The Examiner further notes confusion regarding the claim terminology of “occurrence.” Applicants respectfully disagree with the Examiner’s position that this term is indefinite. The IEEE Authoritative Dictionary of IEEE Standard Terms defines occurrence as “an individual instance of entity, record or item, containing a specific set of values for its constituent parts.” As recited in the claims and the specification, the term occurrence includes the existence of a specific or particular data.

Therefore, reconsideration and withdrawal of the present rejection is respectfully requested.

Rejection of claims under 35 U.S.C. §103(a)

Claims 1, 2, 4, 6-16, 19, 32-33, 35, 37, 43-44 and 46-48 currently stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,188,700 ("Kato"). Applicants submit the present rejection is improper as Kato fails to teach or suggest all of the claimed limitations recited herein.

Kato is directed to, *inter alia*, encoding MPEG signals using variable rate encoding and dynamic varying transmission buffers. Stable signal reproduction is performed on an encoded signal transmission without causing any breakage of a buffer on the side of a decoder system when the transmission bit rate is changed. Therefore, using variable bit rate digital signal, Kato teaches using a temporary buffering for temporary storage to perform rate control. Kato uses a constant sized code buffer and alters an output bit rate from the encoder buffer to a new value of the encoding bit rate.

On page 4 of the present Office Action, the Examiner states that "Kato et al. does not expressly disclose that these "limits" c-d and a-b are determined by the buffer delay and time stamp information. However, it would have been obvious that these "limits" were derived from such information." Applicants respectfully disagree and submit that Kato in fact teaches away from the Examiner's obviousness assertion.

Kato states that "the area on the right side of a line c-d shows changes in the bit occupancy quantity of the decoder buffer, and the area on the left side of the line c-d shows changes in the bit occupancy quantity of the encoder buffer" of FIG. 3. (see col. 3, lines 6-10). In FIG. 3, the graph illustrates time on the X-axis and therefore the bit occupancy quantity is correlated to a time dimension, such as the variable Tau. But upon further inspection, this variable Tau is dependent upon the corresponding number of bits (the Y-axis term) relative to the encoder and decoder buffer bit occupancy quantity. Therefore, Kato teaches a system that correlates transmission offsets for variable bit rates based on bit occupancy quantities and available resources for the storage of corresponding bits of data.

Regarding claims 1, 33 and 43, the claimed present invention recites, *inter alia*, "determining a first lowest bit occurrence based on the first time stamp information and the buffer delay information." (emphasis added). The buffer delay information is a time-based factor such that the first lowest bit occurrence is determined on both time-based factors of "time stamp information" and the "buffer delay information." Kato teaches a system that determines

transmission based on the changes in bit occupancy quantities and the present invention is directed to multiplexing data streams using buffer delay. It would not be obvious for one of ordinary skill in the art to modify the teachings of Kato to achieve the present invention because bit quantity levels do not obviously correspond with buffer delay but rather quantity levels are directed to available resources and NOT time-based calculations for determining constraints.

Regarding claims 2, 4, 6-9, 11-12 and 32, Applicants respectfully resubmit the position regarding claim 1 and submit that these claims contain further patentable subject matter in view of the prior art of record. As Kato fails to teach or suggest all of the claimed limitations, Kato fails to teach or suggest the further limitations recited herein. Therefore, for at least the reasons stated above, it is submitted the present rejection is improper and should be withdrawn.

Regarding claim 10, Applicants respectfully resubmit the above-offered position regarding the teachings of Kato, as discussed with respect to FIG. 1. Furthermore, Applicants reiterate that Kato disclose buffer occupancy based on available resource, which is inconsistent with the claimed buffer delay. Even though Kato discloses that based on a constant data output rate of "R," the availability of future buffer resources can be determined, this is inconsistent with the claimed present invention because the constant data output rate "R" does not determine delay, but Kato teaches calculating the delay time "T," as illustrated in col. 5, lines 59-61, and this delay is based on a rendering of the decoded MPEG images, not delay in buffer resources. Therefore, for at least the reasons stated above, it is submitted the present rejection is improper and should be withdrawn.

Regarding claims 13-16, 19 and 46-49, Applicants respectfully resubmit the position regarding claims 1 and 43, and submit that these claims contain further patentable subject matter in view of the prior art of record. As Kato fails to teach or suggest all of the claimed limitations, Kato fails to teach or suggest the further limitations recited herein, including failing to teach or suggest determining a second lowest bit occurrence constraint based on the second time stamp information and the buffer delay information. As discussed above with respect to FIG. 1, it would not have been obvious to one skilled in the art based on the teachings of Kato to determine the constraint based on the buffer delay information as Kato teaches bit occupancy to determine delay, in conjunction with decoding processing requirements. Therefore, for at least the reasons stated above, it is submitted the present rejection is improper and should be withdrawn.

Regarding claims 35 and 37, Applicants assertion confusion. Support is not provided for either of the rejections of these claims. Moreover, claim 37 is dependent upon claim 36, to which the Examiner indicates on being unpatentable over Kato in combination with U.S. Patent No. 6,598,172 ("VanDeusen"). Therefore, it is improper for the Examiner to herein assert that claim 37, containing further patentable subject matter than independent claim 36 is rejected solely in view of Kato. Clarification is respectfully requested such that Applicants may properly respond.

Therefore, reconsideration and withdrawal of the present rejection is respectfully requested. Applicants further request passage of the present claims to issuance. Should the Examiner maintain the present rejection, Applicants request further support for the Examiner's obviousness assertion regarding the teachings of Kato as applicable to buffer delay in view of the Kato's bit occupancy quantity teachings.

Claims 3, 5, 35 and 36-42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kato in view of VanDeusen. Applicants respectfully submit that the combination fails to generate the claimed present invention.

Claim 36 recites, *inter alia*, "multiplexing the packets from the plurality of data streams ... to provide a drift compensated output data stream." The present invention utilizes the t_{earliest} and t_{latest} values for each of packet to provide a drift compensation. VanDuesen teaches a system that applies drift compensation metrics to a data packet. If one having ordinary skill in the art combined these references, the resultant combination would apply drift metrics to a data packet whereas the present invention recites multiplexing a data packet with the drift metrics therein. The combined system would apply drift metrics to the completed packet and the present invention uses the drift metrics to generate the packet. Therefore, these are completely inconsistent systems.

Regarding claims 37-42, Applicants respectfully resubmit the position regarding claim 36 and submit that these claims contain further patentable subject matter in view of the prior art of record. As Kato fails to teach or suggest all of the claimed limitations, Kato fails to teach or suggest the further limitations recited herein. Therefore, for at least the reasons stated above, it is submitted the present rejection is improper and should be withdrawn.

Regarding claims 3 and 5, Applicants respectfully resubmit the position regarding claim 1 and submit that these claims contain further patentable subject matter in view of the prior art of

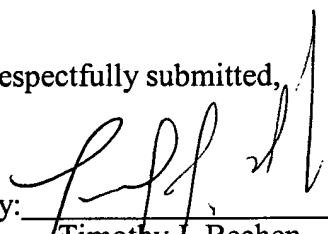
record. As Kato fails to teach or suggest all of the claimed limitations, Kato fails to teach or suggest the further limitations recited herein. Therefore, for at least the reasons stated above, it is submitted the present rejection is improper and should be withdrawn.

CONCLUSION

For the foregoing reasons, withdrawal of the rejections and allowance of the claims is respectfully requested. If there are any questions or comments regarding this response, the Examiner is encouraged to contact the undersigned at 312-609-7500.

Respectfully submitted,

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